ANTHROPOLOGIC LITERATURE

Die Sprache der Zimshīan-Indianer in Nordwest-America. Von Dr
A. C. GRAF VON DER SCHULENBURG. Braunschweig: 1894. 4°,
372 pp.

Dr von der Schulenburg has undertaken the laborious task of com-
piling a grammar of the Zimshīan (Tsimshian) language from the
translation of the Gospel made by Bishop Ridley. Anyone who has
undertaken to study a language from material of this character will
appreciate the labor involved in the task and the numerous sources of
error that obscure the structure of the language. The translations,
which are generally, as in this case, made with the assistance of some-
what educated natives, are never free from error, and often are incon-
sistent in the phonetic rendering or morphological interpretation of
grammatical phenomena. It requires, therefore, an extraordinary
degree of judgment and of caution to reach satisfactory results.
While the present work bears all the marks of most painstaking indus-
try, the author has not succeeded in overcoming the difficulties of
grammatic interpretation. He has left his analysis so incomplete that
the characteristic features of the structure of the language do not
appear with sufficient clearness.

A discussion of the morphology of the language would require,
first of all, an explanation of the fundamental morphological processes
—reduplication, and word formation by means of prefixes and suffixes.
The tendency to form words by means of prefixes is one of the most
characteristic features of Tsimshian. Dr von der Schulenburg, un-
fortunately, has been misled by the 'lack of consistency in printing,
prefixes often being represented as parts of words, often as independent
words. He has accordingly treated the same subject in one place as a
dependent prefix, in another as an independent word, thus creating a
great deal of confusion in the simple structure of the language.
Neither has he made an analysis of the functions of prefixes. It would
seem that we may distinguish nominal and verbal prefixes. Purely
nominal prefixes are either locative or adjective ; or they transform
verbs into nouns, such as prefixes for the *nomen actoris*, etc. Purely
verbal prefixes are either prepositional or adverbial ; or they transform
nouns into verbs. One of the most striking features in the use of these

prefixes is the use of pairs of prepositional verbal and locative nominal prefixes ; for instance, *ludhat gishga zumtemplega,* " he was in the temple " (*lu-*, in ; *dha,* to be ; *-t,* he ; *gishga,* preposition ; *zum-*, interior of ; *temple,* temple ; *-ga,* absence).   Here *lu-* and *zum-* form a pair of prefixes.   Another pair are *le-* (verbal prefix), on ; *lak-* (nominal prefix), surface, top of.   A number of very special ideas are expressed by means of prefixes ; such as, stopping a motion, in darkness, actions done while in motion.   Prepositional prefixes which merge into local adverbial prefixes are highly developed : on, in, towards, around, up, down, towards sea, inland, up river, down river, against.   Some of these show nice differentiation of meaning : upward and downward along the ground, upward and downward in the air, into and out of from the side, into and out of from the top.   Most of these shades of meaning have not been recognized by the author.   The following translations of prefixes require corrections : p. 56, *klthna-*, prone ; p. 57, *klthum-*, around an obstacle ; p. 57, *bak-*, upward along ground ; *man-*, upward through the air ; p. 58, *tiki-*, down through the air ; p. 59, *lthim-*, stopping a motion ; p. 60, *ta-* (only in plural), extreme ; p. 67, *gul-;* the examples given here mean partly *gul-*, empty (*gulwalp,* house without inhabitants), partly *tkul-*, against ; p. 68, *gwan-*, near ; p. 70, *ksh-*, extreme ; p. 72, *ōksh-*, out of from top.   Here belong also the prefixes enumerated on p. 7, and many of those on pp. 84 ff., such as *gup-*, really ; *shin-*, about ; *lugwil-*, for good ; *shim-*, much, very, real ; *wī-*, great ; p. 87, *zilum-*, into from the side ; *logum-*, into from top ; *yaga-*, down along ground (see above, *tiki-*); p. 88, *haldum-; agwi-*, outside ; *zinsh-*, deserted ; p. 91, *altha-*, in the dark ; *hashba-*, already ; p. 92, *lugwil-*, for good (see p. 85); p. 94, *gidi-*, right there ; *shidi-*, often ; p. 95, *alu-*, publicly ; p. 97, *naga-*, each other ; p. 98, *zum-*, in ; *lak-*, on.

A number of so-called " formatives " which the author enumerates in this chapter are actually substantives ; *e. g.,* *zagash,* along, which evidently means, edge of ; *hazaklthk,* in front of ; *lakau,* top of ; *hagau,* place behind ; *tkulan,* place behind ; *awa,* proximity ; *adup,* place opposite ; *miyan* (p. 104), foot of tree.   In short, in the chapter on formatives the most heterogeneous subjects are thrown together ; and prefixes which belong together have been separated, so that the function of the prefix in the structure of the language is greatly obscured. Nor do we find any mention of the tendency of the language to form compound words embracing a whole group of prefixes : *shimalthalutikidoulth,* really to go down inside in the dark.

The function of reduplication is not set forth in full, except insofar as it relates to the formation of plurals.   From an examination of the

examples given by von der Schulenburg, it would seem that reduplication does not form real plurals, but much rather distributives, as is the case in many American languages. Therefore we find it used for the frequentative of the verb, the simulative, and with the prefix indicating actions done while the subject is in motion. The phonetic laws underlying reduplication are not stated in the grammar, probably because Bishop Ridley's method of spelling does not bring out the fundamental fact of the existence of a hiatus between the reduplicated syllables and the stem. The principle of reduplication consists in the repetition of the whole word with shortened vowel up to the first consonant following the first vowel inclusive. Von der Schulenburg's "reduplication of last syllable" does not exist, but can be shown to be regular reduplication. While the number of classes of words that form the plural in various manners may be somewhat simplified, the whole subject of formation of plural is perhaps the most satisfactory in the whole book.

In the difficult chapter on the verb, the author does not show any very clear insight into the structure of the verb in American languages. The great paucity of tenses is striking, but the existence of a well-developed passive and the use of passives of transitive verbs for intransitive verbs, would have required much fuller treatment. But our principal criticism is directed against the treatment of the incorporated pronoun. There are two forms,—a suffixed form 1st p. s. *-ū*, 2d p. s. *-un*, 3d p. s. *-t ;* 1st p. pl. *-m*, 2d p. pl. *-shim*, 3d p. pl. *-det*, and another consisting of prefixes : 1st p. s. *na-*, 2d p. s. *ma-*, 3d p. s. *t- ;* 1st p. pl. *dup-*, 2d p. pl. *mashim-*. Even if the author was not able to find a clew to the significance of the two sets of forms, their existence and occurrence ought to have been explained. It would seem that the second form has a demonstrative significance, but the subject is not clear by any means.

The language has a strong tendency to indicate in verb, noun, and preposition the location of the action as visible or invisible, the former by the sound *d*, the latter by *g*. Von der Schulenburg uses for these forms the somewhat unfortunate term "article," while they would much more properly be called "demonstrative affixes." Particularly the preposition *a* has the tendency to take *d* or *g* as prefix, according to the location of the event. The last word of a sentence, or the verb very often, takes the suffix *da* or *ga*, indicating presence or absence ; these, while phonetically identical with the preposition mentioned before, are purely demonstrative, and of a quite different origin. It is not correct to treat both as identical. The word *t'in* is also called an article by the author, who thinks that it indicates persons who take part in an action

or witness an event. It seems that the word is generally best translated by the relative pronoun, and I am inclined to believe that it is a verbal noun with prefixed third person singular. In the reflexive pronoun the author does not distinguish the subjective form *lip* and the objective form *geluksh*.

One of the most peculiar features of the Tsimshian language is the use of connective suffixes for indicating the syntactical relation of parts of a sentence. There are two of these : -*sh* indicating the connection of the preceding part of the sentence with a proper noun, a term of relationship, or an independent pronoun, and -*lth*, indicating the connection with all other classes of substantives or pronouns. The incorporation of the pronominal object, which in many American languages forms the basis of the sentence, is only slightly developed in Tsimshian. The connective suffixes perform the function of this incorporation. The verb, which generally precedes the subject, takes the connective in order to indicate its relation to the subject. Prepositions, conjunctions, numerals, also take it ; but adjectives, adverbs, and genitives that are not possessives or partitives take the connective suffix -*um*.

The second part of the book is taken up by a vocabulary, which is very inconveniently arranged, so that it is all but impossible to find the words that are etymologically connected. Furthermore, varieties of sounds that in the texts are distinguished by diacritical marks are arranged promiscuously. I add a few corrections to the vocabulary :

p. 202.   *aiwāl*, long time.

p. 203.   *shaakshīyā*, to cause to increase.
           ltha a'akshīyāouqushga zīūsh-taga, when the daylight increased.
           sha'alashgwish, to make weak.
           algumgau, to walk sideways.

p. 204.   *alīshk*, hardly.

p. 205.   *amgaul* for *gamgaul*, only one.

p. 206.   *lɛbɛo'n*, wrist.
           āt, cover, enveloping an object.

p. 207.   *awilmagat*, " making all right."

p. 208.   *babaguntk*, to deny.

p. 209.   *bīāk-*, to tear.

p. 210.   *boyin*, take care !

p. 211.   *whagumdak*, disgraceful.
           dalb-, to shrink.

p. 212.   *dalgaulshk*, to ponder over something.
           shadalth, to throw away.
           dap, to measure.

p. 213.   *dāpkunshk*, nail.

p. 214.   *desh*, guts of bear.
           dhōdhō, to sweep (pl.).

p. 215.   *dibā*, to run away with.
           dō, see *dhō*, to sweep.

p. 217.   *mandukīāgw-*, to hold up.
           duphaitk, short.

p. 218.   *zilumgā*, to take into.

p. 219.   *gabakshk*, to kick.
           gaboga, cirrus clouds = cockle-shells of sky.
           gagai'in, to be sleepy.

p. 221.   *gakhashīepk*, epidemic ; *k-k*, accident.

p. 222.   *gāmuksh*, cape, made of wool of mountain goat.
           g·'aphā'yetk, to blame = to turn over a long thing.
           gashbagwulthkzhū, to go out about astray : *gashba-*, astray ; *gwulth-*, about.
           gashbashawāl, to act without

knowing what one does.

p. 223.   *wale*, to carry on back.

p. 224.   *gaubunum yōta*, an eater ; from *gaub*, uvula.

p. 225.   *gauksh*, maple.

p. 226.   *gaum*, soft.

p. 228.   *giaksh*, calm.

p. 229.   *whanahôkshgum giat*, a pure man.

p. 230.   *hūkgagigīaushk*, man who is very particular.

p. 231.   *gīiza*, almost.
gikgizau'unt, rear of home.

p. 232.   *gishgeshgum gagaud*, jealous.
gishiyā, to inherit, to go from one to another.
gishwun, to transplant.
gītk, raised.

p. 233.   *gol*, to fall and break.

p. 234.   *gouwilg*, wound around.

p. 236.   *gulamīān*, not to get what one wants.
guldau, away from the village, in the woods.
gulīamuksh, to strew.
gulthaudak, to sip.

p. 238.   *gunōtk*, week, Sunday = well-dressed.

p. 240.   *gwashau*, pig (Chinook : *cochon*).

p. 241.   *gwilthgok*, to nod with the head.
gwishtīyam, to lend on interest.
gwunuksh āmtk, pretense to be good.

p. 243.   *hagimuk-zaltk*, towel = to wipe face with.
hagwilō, rope.

p. 244.   *hāk*, difficult.

p. 245.   *haldāo-*, to be bewitched.
halīmga, sing : *hagyi'mga*, to wipe with.

halthau, calico.
mεg'âqs, salmon berries.

p. 246.   *shūbashum hanāk*, young girl.
hanwilāgw-, to destroy.
hat'ā'qs, pole for canoe.
hathaudak, to boil.

p. 247.   *hēkul*, to persist.

p. 248.   *hīdō*, report.

p. 253.   *k·ā'maks*, cape, worn in rainy weather.

p. 254.   *kbīsh*, box (?).
puksh (instead of *kbūksh*).

p. 255.   *klām*, to become inebriated : *k-*, to eat ; *lām*, rum.
klthinoush, tin.
klthipdalthdalth, split all over.

p. 256.   *kshadōmuksh*, to squeeze out.
kshalthwailukshish, water mixed with something else.
kshashīshiksh, to pull out.

p. 257.   *kshīāshk*, came out of.

p. 258.   *kwana'ks*, spring of water.

p. 259.   *kzadamsh*, to squeeze in middle.
kzinsh zagush, to inherit = to take what is left over by death.
la'abel, at once.
la'āk, starvation.
lag, needle.
lahēl, to stop, v. a.

p. 261.   *lakshintk*, to wash all over.
lālt, snake.

p. 262.   *laulok*, rotten.
les'iā'n, a boil.

p. 271.   *ma'ol*, epileptic fits = like bear.

p. 272.   *milthītk*, green = like leaf.
mawaza, foolish = like land otter.

p. 273.   *mīhoksh*, sweet-smelling.

p. 274.   *mishmūsh*, cow (Chinook).

FRANZ BOAS.

The Play of Animals. By KARL GROOS. Translated with the Author's Coöperation by ELIZABETH L. BALDWIN. With a Preface and an Appendix by J. MARK BALDWIN. New York : D. Appleton and Company, 1898. 12°, xxvi, 341 pp.

Although not nominally anthropologic, this work is of much interest to anthropologists ; for man is preëminently *the* playing animal, and the